

## **DETAILED ACTION**

### ***Election/Restrictions Requirement Withdrawn***

1. Applicant's election with traverse of the Group-II invention in the reply filed on March 06, 2008 is acknowledged. After reconsideration, the election/restriction requirement set forth in the previous office action is hereby withdrawn.
2. Accordingly, claims 1-8 are pending in this application; and all of them remain active in this office action.

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.

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- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3. The disclosure is objected to for failing to follow the above guidelines.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 7 recites the subject matters of the wiping roller rotating more slowly than the ether pressing or guide rollers in the recited continuous roll-to-roll procedure. However, the continuous roll-to-roll procedure naturally or normally requires a same linear speed at every position along the process line; and the disclosure lacks an adequate description regarding how such same linear speed could be maintained if the recited wiping roller rotates more slowly than the ether pressing or guide rollers,

especially given that the wiping roller (8) is even smaller than the pressing or guide rollers (2) shown in Fig. 1 of the instant disclosure.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the term of "and/or" in defining the subject matters: a spacing I between two adjacent conductor tracks, two adjacent electrodes and between a conductor track and/or an electrode of less than 10 pm in the lower layer. However, it fails to clarify between which two of the multiple elements the recited spacing I is defined, when the term of "and/or" is interpreted as "and".

Claim 2 recites the term of "the process for producing a conductor track"; but it lacks a sufficient antecedent basis in the claim.

Claim 3 recites the term of "conductive material"; but it lacks a sufficient antecedent basis in the claim.

Claim 4 recites the term of "excess conductive organic material", but fails to clarify its relationship with the organic material already defined in claim 2.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 1, insofar as being in compliance with 35 U.S.C. 112, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawase (US 2003/0141807).

Kawase discloses an organic electronic component (particularly see Fig. 10; also see [0084]), including: a lower layer (4) having a top surface with a spacing I between two adjacent conductor tracks (14 and 18), wherein at least one of the conductor track is arranged in a recess (34) of the lower layer, wherein the recess is produced by a laser, the recess having relatively steep side walls substantially generally perpendicular to the top surface and a bottom surface, the recess exhibiting relatively substantially sharp contours at the junction of the side walls with the bottom recess surface and with the lower layer top surface; and where the bottom surface is naturally relatively rough as compared to the top surface of the lower layer, since the bottom surface is formed through laser drilling/burning in a manner substantially same as that of the instant invention.

Although Kawase does not expressly disclose that spacing I between the two adjacent tracks can be less than 10 um in the lower layer, it is noted that such spacing is an art-recognized parameter of importance, subject to routine experimentation and

optimization; and that small spacing is always desirable for increasing high degree of circuit integration.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device of Kawase with the spacing between the adjacent conductor tracks being less than 10  $\mu\text{m}$ , so that an organic electronic component with optimized performance and/or with increased degree of circuit integration would be obtained.

10. Claims 2-8, insofar as being in compliance with 35 U.S.C. 112, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawase (US 2003/0141807) in view of Ohtani (Ohtani et al., US 5,494,781) and/or Bernds (Bernds et al., WO02/47183; of record; please see US 7,229,868 for translation).

The disclosure of Kawase is discussed as applied to claim 1 above.

Kawase naturally discloses a process for making the above component. And, Kawase further discloses that conductive organic material can be used to form a conductor track/electrode (see [039]).

Kawase does not expressly disclose that the laser drilling/burning can be through a mask and/or that the process further involves continuous roll-to-roll procedure. However, one of ordinary skill in the art would readily recognize that such mask can be desirably used for achieving desired circuit patterns, as readily evidenced in Ohtani (see the mask 20G and/or 20G' and the pulsed laser light in Fig. 17); and, that such roll-to-roll procedure can be desirably utilized so as to speed up the process and/or to reduce

the cost, as readily evidenced in Bernds (see the roll-to-roll procedure in Fig. 2, including scraping, and wiping of the conductive organic material).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a laser mask such as that of Ohtani and/or a roll-to-roll procedure such as that of Bernds into the making of the component of Kawase, so that a process for making an organic electronic component with desired circuit pattern(s) and/or with fast manufacturing speed and/or reduced process cost would be obtained.

Regarding claim 7, insofar as being in compliance with 35 U.S.C. 112, it is further noted that the roll-to-roll procedure of Bernds further includes the pressing or guiding rollers (10).

Regarding claim 8, it is further noted that it is well known in the art that the excimer laser is commonly used in the art for laser burning/drilling/scribing with desired power and/or control.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shouxiang Hu whose telephone number is 571-272-1654. The examiner can normally be reached on Monday through Friday, 8:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Gurley can be reached on 571-272-1670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shouxiang Hu/  
Primary Examiner, Art Unit 2811